

Remarks

Claims 16-51 stand rejected under 35 U.S.C. §103(a) over U. S. Patent No. 5,818,528 to Roth et al. ("Roth") in view of U. S. Patent No. 4,761,544 to Poland ("Poland"), and further in view of U. S. Patent No. 4,868,375 to Blanford ("Blanford").

Claims 19-27, 28, 43-51 are cancelled without prejudice or disclaimer for fee reduction purposes and for purposes of reducing issues for consideration. The cancellation of claims will not be taken as an indication that the applicants believe that the cancelled claims are properly rejected and applicants reserve the right to prosecute rejected claims in a related application (e.g., a continuation or other application having common supporting specification).

Regarding the independent claims, claims 16, 19, and 25 recite:

16. (Original) In a reading apparatus for scanning and decoding image data that is encoded in one of a plurality of types of optically readable indicia, in combination:  
    scanning means for scanning said indicia and generating image data indicative of the data encoded therein;  
    a parameter memory space for storing a list of parameters including a plurality of parameters that define the operating modes of said apparatus, said list of parameters including a plurality of code options that identify the decoding programs that are and are not enabled for use during decoding;  
    a menuing memory space for storing a menuing program which enables a user at least to modify said list of parameters;  
    an I/O device through which a data source external to the reading apparatus may transmit reprogram requests and program data to said apparatus;  
    processing means for executing a plurality of decoding programs in an attempt to decode said image data, said processing means being programmed to respond to a reprogram request initiated by said external data source and to receive program data communicated by said external data source;  
    whereby said external data source may modify at least one of said list of parameters, said menuing program and said decoding programs.

19. (Original) In a reading apparatus for scanning and decoding image data that is encoded in one of a plurality of types of optically readable indicia, in combination:  
    an imaging assembly including a solid state image sensor reading said indicia and generating image data indicative of the data encoded therein;  
    a parameter memory space storing a list of parameters including a plurality of parameters that define the operating modes of said apparatus, said list of parameters including a plurality of code options that identify the decoding programs that are and are not enabled for use during decoding;  
    a menuing memory space storing a menuing program which enables a user at least to modify said list of parameters;

an I/O device through which a data source external to the reading apparatus may transmit reprogram requests and program data to said apparatus;

processing means for executing a plurality of decoding programs in an attempt to decode said image data, said processing means being programmed to respond to a reprogram request initiated by said external data source and to receive program data communicated by said external data source;

whereby said external data source may modify at least one of said list of parameters, said menuing program and said decoding programs.

25. (New) In a reading apparatus for scanning and decoding image data that is encoded in one of a plurality of types of optically readable indicia, in combination:

an imaging assembly including a two-dimensional solid state image sensor reading said indicia and generating image data indicative of the data encoded therein;

a parameter memory storing a list of parameters including a plurality of parameters that define the operating modes of said apparatus, said list of parameters including a plurality of code options that identify the decoding programs that are and are not enabled for use during decoding;

a menuing memory space storing a menuing program which enables a user at least to modify said list of parameters;

an I/O device through which a data source external to the reading apparatus may transmit reprogram requests and program data to said apparatus;

processing circuit for executing a plurality of decoding programs in an attempt to decode said image data, said processing circuit being programmed to respond to a reprogram request initiated by said external data source and to receive program data communicated by said external data source;

whereby said external data source may modify at least one of said list of parameters, said menuing program and said decoding programs.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See MPEP §2143.

Regarding the Examiner's rejections of claim 16, claim 16 recites "scanning means for scanning said indicia and generating image data indicative of data encoded therein. Claim 16 further recites "processing means for executing a plurality of decoding programs."

In forming a rejection as to clauses recited in means plus function form, the Examiner should show that at least one of four factors supporting a conclusion of equivalents is present as are outlined in MPEP §2183 in order to make out a *prima facie* case of equivalents.

Applicants cannot find that the Examiner has followed the provisions of MPEP §2183 in rejecting claims 16-18 and, therefore, regard the rejection of claims 16-18 to be improper.

Further regarding the rejection of claims 16, 19, and 25, the primary reference applied against claims 16, 19 and 25 is Roth. However, regarding reprogramming functionality, Roth at column 15, lines 10-14 states: "The CPU board includes 512 Kbytes of EPROM 230, which is used to store the basic operating system and the decoding software. The operating system and decode algorithms can be upgraded or modified by providing new EPROM devices." By contrast, applicants in claims 16, 19 and 25 specifically recite "an I/O device through which a data source external to the reading apparatus may transmit reprogram requests" and "a processing means or circuit which is "programmed to respond to a reprogram response initiated by said external data source."

The reprogramming method called for by Roth (*i.e.*, replacing a chip) is opposed to the reprogramming circuitry as recited in claims 16, 19, and 25. In fact, the reprogramming method of Roth is characterized in the Background by the applicants as being disadvantageous. In the Background the applicants' state: "One approach to accomplishing this reprogramming is to reprogram a reader locally, *i.e.* on site, by, for example, replacing a ROM chip...Because of the expense...[this] approach [may not be] practical or economical. (Applicants' Background, Paragraph 0018).

The Examiner must consider passages of references that teach away from a claimed invention. A prior art reference that "teaches away" from the claimed invention is a significant factor to be considered in determining obviousness. References cannot be combined where a reference teaches away from their combination. *See* MPEP §2145.

In view of the above, applicants regard Roth, the primary reference, to be a reference that teaches away from the invention recited in claims 16, 19, and 25 and at least for that reason regard the rejection of claims 16, 19, and 25 to be improper.

While rejections of the base claims are improper, applicants note deficiencies with the dependent claim rejections as well as the base claim rejections.

For example, regarding dependent claims 17, 20, and 26 dependent claims 17, 20, and 26 are all disposed of by the Examiner with the casual remark "Regarding claims 17, 20, 23 and 26 see the discussions above regarding claim 16."

In fact, claims 17, 20, and 26 are not covered by the discussion regarding claim 16. Claims 17, 20, and 26 recite important elements respecting the receipt of data "which modifies at least one of said decoding programs."

The Examiners discussion regarding claim 16 does not demonstrate, and does not attempt to demonstrate where in a prior art reference the specifically recited elements of claims 17, 20, or 26 are shown or suggested.

A plurality of claims should never be grouped together in a common rejection, unless that rejection is equally applicable to all claims in the group. MPEP §707(d). Also, when rejecting a claim for want of non-obviousness, the Examiner must clearly explain the pertinence of each reference, where not apparent, and must specify each rejection claim. 37 C.F.R. §1.104.

The Examiner's rejections of claims 17, 20, and 26 cannot reasonably be viewed as being properly made under the requirements of MPEP §707(d) and 37 C.F.R. §1.104.

Regarding dependent claims 18, 21 and 27, dependent claims 18, 21 and 27 are all disposed of by the Examiner with the casual remark "Regarding claims 18, 21, 24 and 27, see the discussions above regarding claim 16."

In fact, claims 18, 21 and 27 are not covered by the discussion regarding claim 16. Claims 18, 21 and 27 recite important elements respecting "parameters specifying which of a

plurality of scanning-decoding relationships are to exist between scanning and decoding activities.”

The Examiners’ discussion regarding claim 16 does not demonstrate, and does not attempt to demonstrate where in a prior art reference the specifically recited elements of claims 18, 21 and 27 are shown or suggested.

A plurality of claims should never be grouped together in a common rejection, unless that rejection is equally applicable to all claims in the group. MPEP §707(d). Also, when rejecting a claim for want of non-obviousness, the Examiner must clearly explain the pertinence of each reference, where not apparent, and must specify each rejection claim. 37 C.F.R. §1.104.

The Examiner’s rejections of claims 18, 21 and 27, merely making reference to discussion regarding claim 16, cannot reasonably be viewed as being properly made under the requirement of MPEP §707(d) and 37 C.F.R. §1.104.

Additional claims are disposed of in the same manner by the Examiner. For example, the entirety of claims 32-51, without any specific or substantial reference to any actual claim recitations, are casually disposed of with the following sweeping statement:

Regarding claims 32-51, see the discussions regarding claims 1-31. The claim differs in calling for specific decoding algorithms, and specific reading-decoding options. Though Roth is silent about the specifics of the decoding algorithms and reading/decoding relationships, the Examiner is of the view that by disclosing multiple algorithms for decoding 1D/2D barcodes, the underlying inventiveness concepts of Roth teachings are not limited to any specific reading/decoding techniques. Further, since Roth discloses the use of various decoding algorithms, the steps of providing One Shot or Repeat Until Done options would have been embraced by his teachings by ensuring all decoding algorithms are tried or for scanning operation of a known bar code type (see the descriptions of step 330 of figure 10). (April 15, 2005 Office Action, p. 7).

It is noted that claims 32-51 recite numerous combinations of elements not recited in the claims 16-31. The Examiner’s claim rejections, including the rejection of claims 32-51, referencing a discussion of a prior claims reciting different combinations of element than the

U. S. Patent Application No.: 10/801,937  
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Reply to Office Action of April 15, 2005

rejected claims cannot reasonably be viewed as being proper under the requirements of MPEP §707(d) and 37 C.F.R. §1.104.

A plurality of claims should never be grouped together in a common rejection, unless that rejection is equally applicable to all claims in the group. MPEP §707(d). Also, when rejecting a claim for want of non-obviousness, the Examiner must clearly explain the pertinence of each reference, where not apparent, and must specify each rejection claim. 37 C.F.R. §1.104.

Regarding new claims 52-77, new claims 52-77 recite new combinations of elements related to the subject matter of the previous pending claims. New claims 52-77 are believed to be allowable in that they recite combinations of elements not shown or suggested in the prior art of record.

Accordingly, in view of the above amendments and remarks, applicants believe all of the claims of the present application to be in condition for allowance and respectfully request reconsideration and passage to allowance of the application.

If the Examiner believes that contact with applicants' attorney would be advantageous toward the disposition of this case, the Examiner is herein requested to call applicants' representative at the phone number listed below.

The Commissioner is hereby authorized to charge any additional fees associated with this communication or credit any overpayment to deposit Account No. 50-0289.

U. S. Patent Application No.: 10/801,937  
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Respectfully submitted,

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